II. CLAIM AMENDMENTS

1. (Cancelled).

2. (Currently Amended) The apparatus according to Claim ~~1~~ 9, wherein the at least one holding module is a substrate processing chamber module, and the other module is a load lock chamber module.

3. (Currently Amended) The apparatus according to Claim ~~1~~ 9, wherein the at least one holding module is a load lock chamber module, and the other module is another load lock chamber module.

4. (Currently Amended) The apparatus according to Claim ~~1~~ 9, wherein the at least one holding module is a substrate processing chamber module, and the other module is another substrate processing chamber module.

5. (Currently Amended) The apparatus according to Claim ~~1~~ 9, wherein the other module can be connected to an end of the transport chamber.

6. (Currently Amended) The apparatus according to Claim ~~1~~9, wherein the transport chamber extends between the at least one holding module and the other module, when the other module is connected on an opposite side of the slot from the at least one holding module.

7. (Currently Amended) The apparatus according to Claim ~~1~~ 9, wherein the arm is rotatable relative to the base of the transport vehicle.

8. (Currently Amended) The apparatus according to Claim ~~1~~ 9, further comprising a linear motor connected to the transport chamber for driving the transport vehicle.

9. (Currently Amended) A substrate processing apparatus comprising:

a transport chamber capable of holding an isolated atmosphere isolated from atmosphere exterior to the transport chamber;

at least one substrate holding module for holding a substrate, the at least one holding module being communicably connected to the transport chamber for allowing transfer of the substrate between the at least one holding module and transport chamber;

a transport vehicle movably mounted in the transport chamber, the vehicle having a base and a substrate transfer arm that is movably jointed and movably mounted to the base; and

another module capable of holding the substrate and communicably connected to the transport chamber for transferring the substrate therebetween,

wherein the transport chamber defines a linear travel slot for the vehicle, the at least one holding module being located on one side of the slot, and the arm having articulation for moving a substrate to opposite sides of the slot allowing the other module to be selectably connected to the transport chamber on either side of the slot, wherein the transport vehicle can effect transfer of the substrate between the transport chamber and both

the at least one holding module and the other module ~~The apparatus according to Claim 1,~~ wherein the linear motor is connected to the arm for rotating the arm relative to the base and articulating the arm in opposite directions.

10. (Cancelled)

11. (Currently Amended) The apparatus according to Claim ~~10~~ 17, wherein at least one of the substrate transfer openings has a door that closes and opens the at least one opening.

12. (Original) The apparatus according to Claim 11, wherein when the at least one opening is closed, the transport chamber is isolated from an environment in the at least one processing module.

13. (Currently Amended) The apparatus according to Claim ~~10~~17, wherein the transport chamber has a generally tubular shape defining a substantially linear travel path for the transport vehicle.

14. (Original) The apparatus according to Claim 11, wherein when the at least one opening is closed, the transport chamber has an environment different than the other module.

15. (Currently Amended) The apparatus according to Claim ~~10~~17, wherein the transport chamber has a general tube shape with elongated lateral sides, the other module being connected to one of the lateral sides.

16. (Cancelled)

17. (Currently Amended) A substrate processing apparatus comprising:

a linear transport chamber capable of holding an isolated atmosphere therein, the isolated atmosphere in the chamber being isolated from atmosphere outside the chamber, and having substrate transfer openings;

at least one processing module for processing a substrate, the at least one processing module being communicably connected to a side of the chamber for allowing transfer, through the transfer openings, of the substrate between the at least one processing module and transport chamber;

another module capable of holding the substrate therein and being selectably connected to either the same side of the chamber as the at least one processing module or to an opposite side of the chamber; and

a transport vehicle movably mounted in the chamber to travel linearly in the transport chamber, the vehicle having a base and a jointed substrate transfer arm movably mounted to the base and having a reach so that the vehicle is capable of transferring the substrate between the transfer chamber and both the at least one processing module and the other module,

wherein the chamber has at least one of a minimum chamber width, or a minimum substrate transfer opening width for the given reach of the substrate transfer arm ~~The apparatus according to Claim 10,~~ further comprising a linear motor connected to the transport chamber for driving the transport vehicle and for effecting multi-axis movement of the transfer arm.

18. (Original) The apparatus according to Claim 17, wherein the linear motor is a solid state motor.

19. (Original) The apparatus according to Claim 17, wherein the linear motor is mounted along at least a portion of the transport chamber and is mounted along at least another portion of the other module.

20. (Previously Presented) A semiconductor workpiece processing apparatus comprising:

a first chamber capable of being isolated from an outside atmosphere;

a transport vehicle in the first chamber and movably supported from the first chamber for moving linearly relative to the first chamber, the transport vehicle including a base and an integral semiconductor workpiece transfer arm movably mounted to the base and capable of multi-axis movement relative to the base; and

another chamber communicably connected to the first chamber via a closable opening of the first chamber, the opening being configured to enable the transport vehicle to transit between the first chamber and the other chamber through the opening.

21. (Original) The apparatus according to Claim 20, wherein the opening has a door that closes and opens the opening.

22. (Original) The apparatus according to Claim 20, wherein when the opening is closed, the first chamber is isolated from an environment in the other chamber.

23. (Original) The apparatus according to Claim 20, wherein the first chamber has a generally tubular shape defining a substantially linear travel path for the transport vehicle.

24. (Original) The apparatus according to Claim 20, wherein the first chamber and the other chamber define a substantially linear travel path for the transport vehicle.

25. (Original) The apparatus according to Claim 20, wherein when the opening is closed, the first chamber has an environment different than the other chamber.

26. (Original) The apparatus according to Claim 20, wherein the first chamber has a general tube shape with elongated lateral sides, the other chamber being connected to one of the lateral sides.

27. (Original) The apparatus according to Claim 20, wherein the base of the transport vehicle interacts with at least one wall of the first chamber to movably support the transport vehicle from the first chamber.

28. (Original) The apparatus according to Claim 20, further comprising a linear motor connected to the first chamber for driving the transport vehicle and for effecting multi-axis movement of the transfer arm, and wherein the linear motor is a solid state motor.

29. (Original) The apparatus according to Claim 28, wherein the linear motor extends along at least a portion of the first chamber and along at least another portion of the other chamber.

30. (Original) The apparatus according to Claim 28, wherein the linear motor comprises a forcer component and a reaction component, the forcer component being mounted to the first chamber so that the forcer component is isolated from an environment in the first chamber.

31. (Original) The apparatus according to Claim 30, wherein the reaction component is mounted on the transport vehicle, and the forcer component is mounted on a vertical wall of the first chamber, and wherein when the reaction component is de-energized, the reaction component reacts with the vertical wall of the first chamber to stably support the transport vehicle in the first chamber.

32. (Original) The apparatus according to Claim 20, wherein the transfer arm has an end effector for holding a semiconductor workpiece thereon, and the transfer arm is movably jointed so that the arm is capable of moving the semiconductor workpiece in opposite directions from opposite sides of the first chamber.

33. (Original) The apparatus according to Claim 32, wherein the transfer arm is capable of rotation relative to the base about a first axis, and is capable of moving the end effector along a radial axis relative to the base.

34. (Original) The apparatus according to Claim 20, further comprising yet another chamber communicably connected to the first chamber to allow transfer of a semiconductor workpiece between the yet another chamber and the first chamber, the yet another chamber being at least one of an front end module, a semiconductor workpiece holding module, or a semiconductor workpiece processing module.

35. (Original) The apparatus according to Claim 20, wherein the other chamber is at least one of a semiconductor workpiece holding chamber or a semiconductor workpiece processing chamber, the semiconductor workpiece processing chamber being at least one of lithography module, a metal deposition module, an etching module, or a heating or cooling module.

36. (Original) The apparatus according to Claim 20, wherein the other chamber is a stocker for stocking semiconductor workpiece transport containers therein.

37. (Original) The apparatus according to Claim 20, wherein the other chamber is a load lock chamber.

38. (Original) The apparatus according to Claim 20, wherein the other chamber is a front end module providing an interface between the semiconductor workpiece transport containers and the first chamber.

40. (Previously Presented) A substrate processing apparatus comprising:

a transport chamber capable of having a controlled atmosphere therein;

at least one substrate holding module for holding a substrate, the at least one holding module being communicably connected to the transport chamber for allowing transfer of the substrate between the at least one holding module and transport chamber;

a first transport vehicle movably mounted in the transport chamber, the first vehicle having a first movable substrate transfer arm adapted for moving the substrate between the

transport chamber and the at least one substrate holding module; and

a second transport vehicle movably mounted in the transport chamber, the second vehicle having a second movable substrate transfer arm adapted for moving the substrate between the transport chamber and the at least one substrate holding module;

wherein the transport chamber has a section defining a tube and has several linear travel paths between opposing walls of the tube for the first and second vehicles to travel in the transport chamber, and wherein the first vehicle extends across the tube from proximate one of the opposing walls to proximate another of the opposing walls and the first and second vehicles are capable of moving past one another between the opposing walls of the tube when the first vehicle is using one of the travel paths and the second vehicle is using another of the travel paths.

41. (Original) The apparatus according to Claim 40, wherein the travel paths are generally aligned with each other.

42. (Original) The apparatus according to Claim 40, wherein the travel paths extend longitudinally in the transport chamber.

43.71 (Cancelled)